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# Disruptive Innovation of Gojek Indonesia

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## Abstrak

Automasi dan digitalisasi membawa gelombang baru dalam inovasi dan merusak persaingan di pasar global. Banyak perusahaan baru dan startup yang muncul di pasar. Gojek telah diunduh lebih dari 170 juta orang, aplikasi Go-Jek telah membawa perubahan yang besar di pasar yang secara signifikan mempengaruhi ekonomi Indonesia. Mengacu fakta tersebut, Gojek dikategorikan sebagai inovasi disruptif berdasarkan teori dan prinsip yang dikembangkan oleh Clayton Christensen. Selain itu, riset ini juga membahas faktor-faktor yang mendorong Gojek menjadi sebuah inovasi yang disruptif. Dalam penelitian ini, studi literatur dari jurnal dan media digunakan Riset menemukan bahwa Gojek dapat dikategorikan sebagai inovasi disruptif yang berhasil mentransformasi pasar. Inovasi adalah budaya inti organisasi, yang membuat perusahaan berhasil mempengaruhi pasar. Beberapa faktor internal dan eksternal seperti kepemimpinan, struktur dan budaya organisasi, pendanaan eksternal, hukum yang belum berkembang, kebutuhan pelanggan, dan penetrasi internet, terbukti mendukung dan mengakselerasi Gojek sebagai inovasi disruptif.

**Kata kunci:** Inovasi Disruptif, Gojek, Budaya Inovasi, Startups

## Abstract

*Automation and digitalization brings a new wave of innovation and disrupts the market globally. Go-Jek successfully transformed the market and has significantly impacted Indonesia's economy with its technology. Having been downloaded by more than 170 million people, Gojek has revolutionized many aspects of life. Considering those facts, could Go-Jek be categorized as a disruptor? This study analyzes Gojek's business as a part of disruptive innovations based on principles developed by Clayton Christensen and discusses factors that drove Go-Jek to become disruptive innovation. In-depth interviews with Go-Jek's employees were conducted to collect the data as well as literature studies. The research finds that Gojek can be categorized as a disruptive innovation that successfully transformed the market. Several internal and external factors, such as leadership, organizational structure and culture, external funding, undeveloped law, customer needs, and internet penetration, have proven to support and accelerate Gojek as a disruptive innovation.*

**Keywords:** Disruptive Innovation, Gojek, Innovation Culture, Startups

## 1. Introduction

Industry 4.0 has significantly impacted our society, creating socio-economic transformations and causing an extensive mobilization in the industries. Artificial In-telligence (AI), Internet of Things (IoT), Robotic, Human-Machine Interface, and sensor technology

have changed the conventional business approach. Research conducted by Barreto, Amairal, and Paraiera explains that industry 4.0 will improve the inbound and outbound processes, where all processes can communicate with each other [1]. It covers developing and integrating innovative information and communication technologies into the industry [1].

Automation and digitalization are the powerful drivers that lead a new wave of innovation and disrupting the existing market. Fernandez-Carames stated that the industry 4.0 paradigm enables autonomous communications among multiple industrial devices distributed throughout a factory and on the Internet [2]. Data management becomes crucial for effective operations in companies. Cloud Computing, Big Data, In-telligent Tensorization, and Embedded Systems offer innovative and smart goods and services, creating new business models, offering opportunities to firms to disrupt the market [3]. Innovation is a crucial factor to gain a competitive advantage and grow their businesses. Companies such as Amazon, Netflix, Airbnb, and Skype are examples of how digitalization offers different values, changes the business models, and disrupts the market. Many startups based on technology enter the market and upend the existing market, such as Uber and Facebook, calling themselves a disruptive innovator.

The idea of "disruption" was advanced by Bower and Christensen as a process by which a smaller company with fewer resources can successfully challenge established incumbent businesses [4]. The disruptive company successfully targeted the neglected market, gaining a foothold by bringing more-suitable functionality, usually at lower price. The theory was developed based on technological innovation studies [5,6]. In 1997, Christensen wrote a book called *The Innovator's Dilemma* and explained the difference between sustaining technology and disruptive technology [7].

Throughout the years, the concept has widened into products and business models. Further research by Christensen, Johnston, and Barragree explained the critical characteristics of disruptive innovation as follows: "it targets customers in new ways, generally lowers gross margins, generally does not improve performance along a trajectory traditionally valued by mainstream customers, and introduces a new performance trajectory and improves performance along parameter with different from those traditionally valued by mainstream customers" [8]. Another book, *Innovator's Solution*, was published by Christensen and Raynor [9]. They refined the term of disruptive technology to disruptive innovation. The book also expanded the scope of disruptiveness in services and business models. Christensen, Baumann, Rugless, and Sadtler widened the context of disruptive innovation in a social term, called catalytic innovations, a subset of disruptive innovations, with their primary focus on social change, usually on a national scale [10]. Recently, Christensen, Raynor, and McDonald explained that disruptive innovation started in two markets that incumbents ignore: low-end market and new market footholds [11].

While many companies claim themselves as disruptors, researchers are still debating about the disruptive

innovation terminology. A critique addressed by Adner identified that the decreasing marginal utility from the performance improvements in major dimensions was an important reason why consumer choices switched from sustaining to disruptive innovation [12]. Several authors questioned Christensen's disruptive innovation theory. Daneels argued that disruptive technology is a technology that changes the bases of competition by changing the performance metrics along which firms compete [13]. Tellis was questioning the sample of industries in Christensen's previous research [14]. Martinez-Vergara et al. argued that disruptive innovation has different impacts on business [15].

Tellis explained that it would be hard to differentiate underperforming technologies from technology with inferior performance but finally ending up being disruptive [14]. The impact of disruptive innovation is different between industries. It is because the customer from the low-end market and mainstream market appreciates the innovation. It is difficult to identify one single definition of disruptive innovation, while many opinions are discussed [16]. Hence, a well-defined measure of disruptiveness should be formulated for future research [17]. Hang, Chen, and Yu, set a comprehensive assessment framework for disruptive innovation [18]. Two preconditions for a market disruption to develop: performance overshoot on the current product's common focal attributes and asymmetric incentives between the current healthy business and potentially disruptive business [19].

Furthermore, a five-step framework has been developed by Rasool, Koomsap, Af-sar, and Panezai to help firms identify their disruptive potential and set a strategy to disrupt the market [20]. Guo, Pan, Guo, Kuusisto constructed a predictive framework considering technological mechanisms, marketplace dynamics, and external environment variables to evaluate disruptive innovations' potential at the early stage [21]. Ben-Slimande, Diridollou, Hamadache focused on the cultural and cognitive determinants of disruptive innovation processes [22].

To better understand, further research in different perspectives should be conducted to evaluate the disruptive innovation theory [19]. Several researchers tested the disruptive innovation concept in different industries such as health care [23], tourist accommodation [24], 3D printing [25], airlines, and complex product systems (CoPS) industries. It is also essential to look at the application of disruptive innovation theory in different environments and countries.

Digitalization and technology have transformed business models and customer behaviors in all countries, including Indonesia. As an emerging market, many startups are established and threatening the incumbent businesses. Go-Jek, the first unicorn based in Indonesia, successfully transformed the market and

has significantly impacted Indonesia's economy. Go-Jek apps have been downloaded by more than 170 million people in Indonesia and South East Asia as well as revolutionize many aspects of life. At first, Go-Jek entered the market with an online motorbike taxi concept in 2010. The company launched the application for automating the order process in 2015. Today, Go-Jek is not only known as a mobile application for online transportation, such as car and motorbike taxis. The company has also leveraged its business to various innovative services, such as GO-FOOD (an application for food delivery service), GO-SEND (courier service), GO-PAY (mobile payments), GO-CLEAN (home cleaning service), and many more. Based on the research conducted by Lembaga Demografi Faculty of Economics and Business Universitas Indonesia, Go-Jek contributed IDR 55 trillion or approximately US\$ 3.85 billion to the Indonesian economy in 2018. Go-Jek opens job opportunities and employs more than a million drivers in Indonesia. Moreover, Go-Jek increased women's participation in the digital economy and improved small-medium businesses' sales through the GO-FOOD platform. Besides, Go-Jek has challenged the incumbent businesses in the market [26].

Considering the massive transformation, it brings to the economy and society, several articles and organizations claim Go-Jek as a disruptor. Recently, International CNBC nominated Go-Jek as one of the world's top 10 disruptor companies [27]. Given its disruptive potential, it would be precious to evaluate Go-Jek from the lens of disruptive innovation theory. The purposes of this research are to present a case study to address the following: first, to have a clear understanding of whether Go-Jek Business is a part of disruptive innovations based on the principles developed by Clayton Christensen on disruptive innovations. Second, to identify factors that have driven Go-Jek to become a disruptive innovator in the market.

The research could give immense insights into the development of business studies on how innovation and disruptions impact the business market. Additionally, there is no prior study discussing Go-Jek as a disruptive innovator. Previous studies about Go-Jek focused on the topics of service quality [28]; utilization of fintech application [29]; and omnichannel strategy [30].

## 2. Literature Review

The terms “disruptive innovation” and “disruptive technology” are becoming popular in business environments. Not rarely big companies claim themselves as disruptors in the market. However, it is frequently misunderstood and not relevant to the concept. Bower and Christensen explained that disruptive technologies offer to the market attributes

that are different from those of the typical value [4]. In the beginning, the disruptive technologies seem interesting only for a new market, look financially unattractive to established companies, and challenging to forecast the future market in the long term. Disruptive technology shifts the market values and moves the upmarket.

In 1997, Christensen wrote a book called *The Innovator Dilemma* [7]. Christensen explained that the developers of disruptive technologies could deliver new performance on the old attributes. Therefore, they will always make improvements to their products' performance and take over the incumbent markets. Moreover, Christensen provided a framework of four Principles of Disruptive Technology to show why the incumbent companies that succeeded in exploiting existing technologies failed to develop disruptive ones. In the book, Christensen also distinguished between the concept of sustaining technology and disrupting technology. Sustaining innovation provides better quality or serves the existing customer with the additional functionality of the products or services. The innovation could be incremental improvements or even a breakthrough.

Christensen and Raynor refined the disruption technology theory with disruptive innovation and widened the application to services and business model innovation [9]. In this book, disruptive innovation is classified into two types of disruption: the low-end market and new market footholds. A low-end market is a market that is usually unserved by the incumbent. It exists because the incumbents only focus on their most profitable and demanding customers by providing better products or services. In the context of new market footholds, the new entrants create a market where none existed. They change the non-customers into customers. Christensen and Raynor gave an example of how personal copiers created a new market not served by Xerox as the incumbent [9]. The new entrant offered affordable solutions for small organizations and individuals instead of Xerox, which targeted large corporations with high prices.

Disruptive innovation can either develop new markets, attract the non-consumers, or provide more convenience at lower prices in the existing market [31]. Furthermore, Christensen et al. also explained that disruption is a process. It takes time for entrants to catch the mainstream customers' attention and shift them to utilize its products or services [11]. Furthermore, the business model of the disrupters is usually different from the existing company.

There were debates on the disruptive innovation concept developed by Christensen; some researchers agree and some not. Based on Christensen's theory, Adner developed a formal modeling approach to classify the nature and evolution of demand in different market segments and identified which kind of market

structures are susceptible to disruption. Adner found that the decreasing marginal utility (willingness to pay for improvements) was an essential aspect of switching consumer choices from sustaining to disruptive innovation [12].

Other researchers criticized the ambiguity of disruptive innovation theory. Danneels suggested that Christensen did not provide a precise and consistent definition of disruptive technology [13]. Research conducted by Govindarajan and Kopalle found that a disruptive innovation should offer a lower price, attract the more price-sensitive customer segment, and create new value propositions to attract new customer segments in the price-sensitive mainstream market; and go through the market from niche to main-stream [17].

Assink conducted research evaluating the disruptive obstacle in a company and concluded that disruptive innovation development is not a one-time effort; to increase innovation capability, a company needs to develop absorptive capacity continuously [16]. Schmidt and Druehl proposed a model to complement Christensen's work and focus on the new product scattering pattern, called a low-end encroachment and high-end encroachment patterns [32]. Hang et al created an assessment framework to evaluate how innovation could be considered disruptive in the low-end and new market setting. They also measured the disruptive potential of a new product by evaluating Google's web-based office applications [18].

Another study by Yu and Hang reviewed the disruptive innovation theory by analyzing the potential inhibitors and enablers of disruptive innovation, namely the in-ternal perspective (the business models and organizational challenges of incumbent firms); the external perspective (environment); the marketing perspective (customer orientation under disruptive change); and the technology perspective (technological strategies for disruptive innovation) [19].

Nagy, Schuessler, and Dubinsky extended the definition of disruptive innovation as: "an innovation with radical functionality, discontinuous technical standards, and new forms of ownership that redefine marketplace expectations." Furthermore, the research also concluded that disruptive innovation should have different characteristics from the incumbent in terms of functionality, technical standard, or form of ownership [33]. Chen, Zhang, and Guo (2016) have created a model for evaluating the timing of technology disruption. The research concluded that the ease and network factors are primary determinants of performance improvement for disruptive technology [34].

A disruptor is not always a start-up company and does not mean it should replace the existing business. Indeed, the existing business with high-end technology can focus on satisfying the most demanding customers

who are less sensitive to price [19]. A recent study by Martinez-Vergara et al defined disruptive innovation as a continuous process over periods, starting in the low-end market or creating a new market to move up toward the established high-end market [15]. Additionally, Liu, Liu, Chen, Mboga evaluate the main characteristics of disruptive innovation as follows: (1) disruptive innovation products tend to be low-cost; (2) highly convenient; and (3) comprehensively reduce the total cost of the target market [35].

### **Driven of Existing and New Product Developments**

Not all disruptive innovations succeed in the market [11]. Different factors contribute to the situation. Additionally, when disruptive innovation succeeds in the market, another question appears on how disruptive innovators manage their disruptiveness?

Research conducted by Adner evaluated how the demand structure influences competition's evolution by proposing a framework to study the demand conditions that enable disruptive dynamics [12]. Further research by Adner introduced the idea of a demand S-curve as a complement to the traditional technology S-curve for disruptive innovations [36]. Rates of technological advance, market sizes, and firms' ability to practice price discrimination impact the threat of disruption [37]. Christensen argued that most incumbent companies who succeeded at disruption maintained their top position in the industry by creating autonomous units to explore ideas and build a new and independent business [38]. The common problem mentioned in The Innovator's Dilemma occurs when the companies focus on answering their customers' wants.

In this case, they often missed the next wave of innovation [7]. Meanwhile, Rothaermel argued that the new startups have a strong potential for disruptive technology but have a limited ability to complement assets as it belongs to the existing market leader [39]. Sood, James, Tellis, and Zhu evaluated some criteria such as timing and order of entry, number of competing technologies, and technology-specific characteristics for forecasting the path of technological innovation [40]. Gaudillat and Quélin noted that incumbent companies could manage disruptive innovation by doing some strategies such as spin-offs, acquisitions, and alliances [41]. Several companies, namely HP, Kodak, and IBM, have implemented different collaborations to develop disruptive innovations [42].

### **3. Methods**

This paper will apply a case study analysis as its research methodology. Yin explained that the case study is preferred in examining a new event when the appropriate behaviors cannot be manipulated. It investigates a recent phenomenon within its real-life context; when there are no precise boundaries between

phenomenon and context, multiple sources of evidence are used [43].

Typically, the case study answers "how" and "why" questions. In this research, some issues that will be addressed are: 1. Is Go-Jek a part of disruptive innovations based on the principles developed by Clayton Christensen on disruptive innovations? 2. How Go-Jek successfully disrupted the market? 3. What are the factors driving Go-Jek as a disruptive innovator?

To examine the disruptive innovation concept in the context of Go-Jek, this study uses the original theory and principles developed by Clayton Christensen. Interviews with Go-Jek's employees were conducted to find information about the company. Furthermore, secondary sources were obtained from extensive resources such as books, journals, research including case study databases related to the theory of disruptive innovation, and also using the online resources, newspaper, and corporate website of Go-Jek, to find some facts about Go-Jek performances and impacts in Indonesia. Resources such as books, journals, research (including case study databases related to the theory of disruptive innovation), and online resources, newspaper, and corporate website. As stated by Yin the primary and secondary data could improve case studies' reliability and validity [43].

## 4. Result and Discussion

### 4.1. Go-Jek as Disruptive Innovation

Considering the original theory of disruptive technology developed by Christensen, disruptive technologies offer the market the packages of attributes that are different from the standard value [7]. Furthermore, the developers always make improvements on their products' performance and take over the incumbent markets. Go-Jek is the first motorcycle-taxi provider, offering a solution for traffic congestion, a common issue faced by big cities in Indonesia. With only 20 drivers at the beginning, Go-Jek offered a better service than traditional motorcycle-taxi drivers, called *Ojek*. *Ojek* is considered general public transportation operated individually and has a base, named *pangkalan*, as a gathering point. The drivers usually wait for the passengers in the *pangkalan*, and line up in a row to avoid stealing passengers from one to another. The drivers offer the service fee without any standard price per kilometer. Generally, the customer and the driver have a "dealing" tariff through a bidding process.

Go-Jek organized the motorcycle-taxi drivers and used telephones to manage the orders, connecting the customers to the drivers, and providing a transparent and standard fee for its services. The number of drivers increased as the number of orders scaled up. Meanwhile, Nadiem Makarim - Gojek's CEO, found

that the call center was not effective in managing its order [44]. Innovation has been developed to give a better service for the customers by creating an application for Android and IOS phones. The application allows the customer to order Go-Jek motorcycle services through phone and mobile applications, making the existing service even better because it is real-time, safer, and with a transparent fee. Speed, innovation, and social impact are three fundamental values of Go-Jek [45].

Christensen et al explained the disruptive innovation could either develop new markets, attract non-consumers, or provide more convenience at lower prices in the existing market [31]. As the first motorcycle-taxi company, Go-Jek created a market where none existed, developed its business in a new market foothold. Christensen and Raynor argued that a disruptor plays in two types of market: low-end and new-market footholds [9]. Go-Jek entered the market with a different business model. The company even successfully attracted the non-consumers of *Ojek* (other transportation's customers) because they offered speed, convenience, and quality of service. Utilizing the GPS (Global Positioning System) on smartphones, the customers and the drivers can quickly meet at a specific location. Furthermore, with an advanced innovation in 2014, the customers could check the price and use the cashless in-app wallet such as Go-Jek Credit or GO-Pay [46]. As saying by its prior employee:

"In Go-Jek, we tried to do our best to innovate our product. We wanted to create a business that can solve our environmental problems. We will reject the idea if it does not bring value to the society, although the idea is profitable."

Research conducted by Wawuru and Adhiutama analyzed the customer's perception of Go-Jek's online services in Bandung [45]. Using the theory of innovation developed by Rogers, the research found that 8.3% of Go-Jek's users in Bandung were innovators (the first users of an application) and 21.7% were the early adopters (pioneers to adopt innovation). Furthermore, it found that 28.1% were the early majority (the first followers to use the application); 26.9% were the late majority (last followers); and 15% were the laggards (the conservative/traditional mind users). Additionally, the research also discovered that Bandung customers adopted the innovation like Go-Jek's app because of its features, accuracy, and on-time service delivery. Besides, other factors such as safety, comfortability in a transaction, the capability to solve the problems, and good impression, were highly correlated. The research has shown how Go-Jek attracted new customers.

Since Go-Jek launched the app in January 2015 and added more services, the number of drivers and the number of transactions have increased, followed by the

spreading of Go-Ride drivers' green jackets in Indonesia's big cities. Go-Jek reached more than 100 million orders across more than 18 products, with the total order volume having multiplied by 1100, and processed more than USD 9 billion annualized gross transaction value (GTV) in 2018 [47]. The company became the first Indonesian's unicorn and even expanded its business in South East Asia, namely Singapore, Vietnam, and Thailand. Today, the Go-Jek app is the biggest consumer transactional technology group in Southeast Asia based on the GTV-basis.

Christensen & Raynold mentioned that disruption is a process. It takes years for Go-Jek to spread its business in Indonesia [11]. In the beginning, the business seemed not interesting for other public transportation companies because of its low margin. Along with the better improvements in its products, especially with its application, the company gained more revenue and expanded its market. Go-Jek successfully transformed the non-customers into its customers. Even the traditional car taxi's customers switched to the motorcycle to avoid the traffic jam in the big cities [48]. Online transportation became a new trend and changed the customer's behavior.

## 4.2. Go-Jek's Factors Driven as Disruptive Innovation

### Internal Factors

#### 1. Organization Structure and Innovation Culture

As a startup company, the organization structure of Go-Jek is concise and lean. On the top level is the board of directors, one layer below is the Chief Executives, the next layer is Department Head, and the bottom layer is the team members/staff [49]. This type of structure allows the organization to make fast movements and decisions.

"Go-Jek has a lean organization structure, so the decision making process is quite simple. Every employee could communicate with everybody without layering. For example, an employee who has an idea/new program could propose to the management as long as it is supported by the strong data and analysis. Then, the promoter will share to the Chief (top) levels. It is as simple as writing an email."

Three principles of the organization, namely organizational investment, bottom-up innovation, building bridges and breaking walls, build a strong foundation for running the business [50]. The first principle, organizational investment, means that people in the organization should be the best at what matters, focus, and prioritize. There is a training program that makes sure everybody in the organization learns and grows. The employee explained that:

"In Go-Jek, each employee has the freedom to learn anything and to be anything. The company encourages

its employees to do something that has a social impact, be creative and innovative, and the most important thing is that the company wants everybody to grow in terms of job enrichment or personal skills."

The second principle is bottom-up innovation. Based on the interview with Gojek's employee, the innovation comes from the bottom line (employees) instead of from the top leaders.

"Teams are encouraged to share ideas, and solve the problem based on their analysis first. As an individual, the employee free to share ideas to their peers and leaders, even to the top level."

For example, when there are problems in the Engineering or Product Development Department, the leader gives the member time for observing and evaluating the case and gets back to the leader with advice or solutions they learned [51]. By doing this, the company believes that the employee will feel appreciated and valued by the organization, and it avoids demotivation as a team member. Moreover, the company sees any mistake as a learning process. The will to be the first has become a spirit in the organization to create something new and update. Christensen explained that when the new technology is disruptive, companies should actively seek to pioneer the market and get the first-mover advantages [7].

The third principle is that the organization creates teamwork between departments, trying to build bridges and break the wall between departments. The leaders share every success story with others in different groups/departments to learn from each other.

Furthermore, the employees are free to be anything, the company gives opportunities for the employees to cross the department and learn any new knowledge. For example one of the respondents said that:

"My background was marketing, but now I am handling operations and I am learning about data analytics."

#### 2. Leadership

Nadiem Makarim is the firm leader behind Go-Jek's success story. Under his leadership, Go-Jek became the most-used app and the most popular ride-hailing app in Indonesia. His leadership style plays an essential role for Go-Jek's achievements. While leading the company, Nadiem is always open to input. Based on the interview with his prior employee, Nadiem is described as an inspirational leader and innovative leader. Everybody in the company is encouraged to make "mistakes," try something new, and not worry about the result. He motivates his peers to be creative and innovative. Instead of answering, he encourages employees to discuss and allows those closest to the ground to be involved in the decision-making process. He coaches his peers to achieve something they

thought impossible to do [53]. This style of leadership creates a strong innovation culture in the organization.

As the founder of Go-Jek, he has a strong vision. He built the company with a strong mission of improving the good living of local ojek. One of the prior employees said that Nadiem is a transformational leader.

“Nadiem is a transformational leader who creates a great organization with strong values and makes a better change to the environment. I really respect him. He gave me an example on how to be a better leader.”

Nadiem built the company not only for making money but also for solving social problems [50]. Furthermore, he treats the drivers as respectable humans, with fair compensation. He provides full accident insurance for the drivers while working, gives them access to health insurance, and trains safe driving lessons.

After Nadiem left the company for the ministry position, Go-Jek still operates well and performs great. More innovations and partnerships were created. One of the key factors of that success is the leaders' role. In Gojek there are two main roles of a leader: solving problems and creating another leader. The prior employee said that:

“What I like working in Go-Jek is the transparency and how open-minded the leader is.”

### 3. Strong Funding

As Go-Jek's business grows massively, it attracts visitors to invest in the company. With the funding support from investors, Go-Jek could improve the application and expand its business. For example, with the funding from KKR & Co LO and Warburg Pincus LLC in 2017, the company could be used as a source for acquiring three financial technology businesses, namely: Mapan, Midtrans, dan Kartuku [54]. The acquisition's goal is to support the leading service of Go-Jek as well as to accelerate the financial inclusion for small businesses in Indonesia. The employees said that the investor funding strongly supports the business expansion.

“One of the Gojek missions is to build the digital ecosystem in Indonesia. The strong funding helped Gojek to optimize growth and to fund the acquisition.”

In 2019, Go-Jek's valuation reached \$10 billion and could be categorized as Decacorn Company [53]. According to thejakartapost.com, Go-Jek has issued 1.7 million shares, or Rp 689,87 billion, in funding rounds from series A to series P. Approximately, 130 individual and institutional investors are listed as registered shareholders, such as Google Asia Pacific, Pegasus Tech Ventures, Visa, Unilever Swiss Holdings, Mitsubishi Motors, etc. Moreover, the U.S. tech giant, Facebook, has invested in Go-Jek. With the bigger investment, Go-Jek could expand its business to

regional markets in Thailand, Singapore, Vietnam, and the Philippines [55].

## External Factors

### 1. Government Regulation

Azzuhri, Syarafina, Yoga, & Amalia argued that Go-Jek won the competition not entirely because of the technology but also because of the lack of government supervision in pricing regulation and online transportation mechanism [56]. Research conducted by Guo et al also explained that innovation with high policy and macroeconomic situations impacts the fulfillment of disruptive potential, whether it can promote or hinder [21].

In Indonesia, public transport is regulated and controlled under the Ministry of Transportation. Together with the local government, they release licenses to operate, define the maximum number of vehicles, and set the price standard. When Go-Jek was first established, there was no specific regulation that managed public transportation using motorcycles. Furthermore, there was no regulation to manage the mobile-based ride-hailing services as well. Years later, online-based taxis emerged in the market aggressively (Go-Jek, Uber, and Grab), and mobile-based transportation became very popular in the community. Many demonstrations from conventional taxi operators and drivers happened in different cities, questioning the legal aspect of online-based taxis. The law number UM.3012/I/21/Phb/2015 was issued by the Ministry of Transportation, which prohibited the mobile-based ride-hailing operation.

The new regulation brought up other actions; the online-taxi drivers and users protested that policy [57-59]. The online-based taxis appealed to the government about the new policy of the Ministry of Transportation. As a result, other policies were issued and revised during the years. Under the Transportation Ministerial Decree No. 108/2017, the government recognized the existence of online-based taxis as public transportation. However, it did not consider the online-based motorcycle taxis (still illegal). PM no. 12/2019 entitled *Perlindungan Keselamatan Pengguna Sepeda Motor yang Digunakan untuk Kepentingan Masyarakat*, has been launched to protect the safety of motorcycle users. It was the first law that accommodated motorcycle taxis, even though there are still debates and discussions about the law's terms [60].

### 2. Competition and Partnership

Gemici and Alpkhan argued that disruptive innovators change the rules of the game that has been set by the incumbent firms and force the incumbents to respond to this attack. The industry responses may be different towards disruptive innovation [61]. Charitou & Markides explained five ways to respond the disruptive innovation: first, the incumbents have to concentrate

on the traditional business, the second way is to ignore, the third way is to exchange roles or change into different business, the fourth is to embrace and scale-up and the fifth response is to adopt the disruption [62].

With the vast growth of the Go-Jek business, the company faced some issues and challenges. Other transportation companies based on technology, such as Grab and Uber, entered the market and competed with Go-Jek. Grab and Uber entered the Indonesian market in 2014 with their online car taxi services. In November 2014, Grab launched Grab ride, which offers motorcycle taxi services, the same business as Go-Jek [63]. Grab challenges Go-Jek's business because it also provides similar services with Go-Jek, i.e., GrabParcel, GrabExpress, GrabFood, and online payment with Ovo [64]. Additionally, in 2018, Grab acquired Uber's business in Southeast Asia, including Indonesia, creating more challenges for Go-Jek's business [65-66].

To tackle Uber and Grab expansions, Go-Jek improved its application and launched Go-Car, a car-taxi service with the same concept as Uber and Grab [67]. Go-Jek competed with the existing taxi companies, i.e., Bluebird, Gamy, Taxiku, and other local taxi companies, by launching its Go-Car. Using the same app and the same values as Go-Ride, Go-Jek partners with personal drivers to serve car-taxi customers. Unlike the incumbents, the customers can check the fees before confirming the transaction, pay with cash or cards, get real-time service, and convenient use. In this case, Go-Jek also competes with Grab-Car and Uber Taxi, which implement the same business model.

Furthermore, the company should deal with demonstrations from different parties, such as the traditional Ojek, (which has been heavily impacted by Go-Ride drivers' existence), and the incumbent taxi companies (who competed with Go-Car drivers). Thousands of public transport drivers protested against Go-Jek and Uber. The drivers of other public transportation such as bajaj, minibuses, and the regular taxis complained about Go-Jek's existence, which harmed their income. Indonesian taxi drivers complained that Uber and Grab were destroying their industry. Go-Jek offered better service with lower price and more convenient use, and most customers of other public transportation switched to Go-Jek services. Not only that, the issue became bigger as there were some fights between Go-Jek drivers and taxi drivers [68-71]. Besides, Go-Jek drivers had been banned by the local government of various cities such as Yogyakarta, Banyumas, Batam, Malang, Pekanbaru, and West Java, because it was illegal and unregulated.

The way Go-Jek responded to the protests was interesting. Instead of doing a head to head competition, Go-Jek offered partnership to the traditional taxis. Blue Bird, the biggest taxi operator in Indonesia, decided to

join forces and formed a partnership with Go-Jek to elevate the digital revolution in Indonesia. The partnership covers technology, promotion, and payment [72]. With this partnership, the passengers can order Blue Bird taxis via Go-Jek. Another Go-Jek's strategy to manage the competition is acquisition. As reported by thejakartapost.com, Go-Jek acquired 4.33 percent shares in the Blue Bird taxi company in February 2020 [55].

As explained earlier, Go-Jek's mission is to build the digital ecosystem in Indonesia. Acquisition strategy has been applied to strengthen the business as well as to create a supportive environment for the company to grow.

### 3. Internet Penetration Rate and Innovation Ecosystem

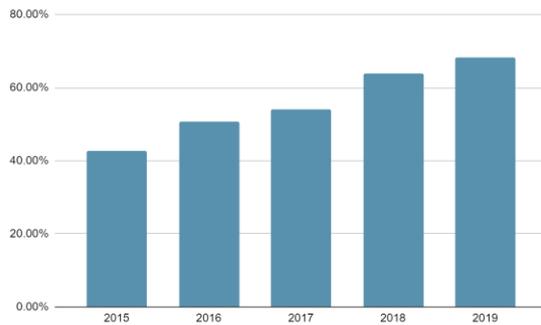
Guerriero argued that the internet penetration rate and information and communication technologies (ICTs) have demonstrated to be instrumental in driving inclusive growth, promoting innovation, enabling the rise of small-and medium-scale enterprises, improving access to education, enabling access to information, and connecting people in remote locations to market [73].

A study by Das, Gryseels, Sudhir, Tan reported that the digital revolution had shaped Indonesia. People in Indonesia were spending around 3.5 hours on the internet via mobile devices and 2.9 hours accessing social media. These numbers were way higher compared to United States customers. Furthermore, the internet tariff in Indonesia was cheaper compared to the neighboring countries. Indonesia was also considered a mobile-first nation, where the study reported that 75% of the online purchases came from mobile devices [74].

Based on the interviews conducted with its employees, one of Go-Jek's success factors is the "right timing" for its business penetration.

"There are many reasons why Go-Jek's successfully in the market. It is the marriage between the power of capital, the power of timing, the power of the digital ecosystem."

Looking at Statista's data in 2020, internet penetration gradually increased from 2015 to 2019 and reached 68.35% in 2019. Both the internet penetration rate and Indonesian customers' behavior, allowed Go-Jek to develop and grow its business in Indonesia. It was not hard to educate the community about the new technology offered by Go-Jek. Furthermore, people can easily share news and experiences with Go-Jek through their social media. By June 2020, the app had been downloaded by more than 130 million users [75].



**Figure 1: Internet penetration of Indonesia 2015-2019 by Statista 2020 [75].**

## 5. Conclusion

This study has examined Go-Jek's business as a part of disruptive innovations based on the original theory and principles developed by Clayton Christensen. From our evaluation, Gojek can be categorized as a disruptive innovation. The business evolved in a new-market foothold, offering a lower price, convenience, and advanced technology. It successfully distracted the market and incumbent business, as well as changed customer behavior. Go-Jek has successfully changed the business environment and created a significant impact on Indonesia's economy.

From the discussion above, several factors have contributed to the success of Go-Jek. Strong leadership, organizational structure and culture, and robust external funding are the organization's internal aspects, which contributed to the success. The strong leadership of Nadiem Makarim, who is a visionary, open-minded, and caring to the society, has shaped the organization culture. The leadership values in Gojek has rooted in the organization. Every leader should perform it best and has the responsibility to create other leaders. Everyone is appreciated and encouraged to be more creative, innovative, and share ideas. Furthermore, Go-Jek's principle of innovation has shaped every individual in the organization to create innovation which brings "impact". The new product should create an impact on the community and solve community problems.

Additionally, external factors such as government regulation, competition, strong partnership, internet penetration rate and innovation ecosystem, supported Go-Jek as a disruptor in the market.

### Implications

#### 1. Managerial Implications

Industry 4.0 opens more opportunities for companies to innovate their business and disrupt the market. Go-Jek shows how technology makes them leaders in the market. Furthermore, this study brings some insights about how the incumbent companies should be aware

of the new disruptors in the market. Continuous improvements and innovations should be managed and a specific team should be developed in the organization to create new business ideas.

Agile organization and strong leadership are needed to disrupt the market successfully. While disruptive innovation takes time to enter and challenge the market, a strong leader plays an essential role in leading the organization to reach the goals. Moreover, innovation should become a company's tagline and firmly rooted in the organization as a culture.

#### 2. Theoretical Implications

This study has proven that successful disruptive innovation changes the business environment and shifts customer behaviors. It gives more insights to prior studies about disruptive innovation in a different setting. It also supports the previous research of disruptive innovation by Clayton Christensen. Not all innovations can be categorized as disruptors, and not all disruptive innovations gain success in the market. This research found that many factors contribute to the success of Go-Jek. Different implications may be applied to different types of business settings. Further research should address disruptive innovation in various ways to gain more understanding.

### Acknowledgment

This article is based on research with the title Disruptive Innovation: A Case Study of Gojek in Indonesia. Gojek is the first unicorn based in Indonesia that successfully transformed the market and has significantly impacted Indonesia's economy. Gojek apps have been downloaded by more than 170 million people in Indonesia and South East Asia as well as revolutionize many aspects of life.

The authors would like to say thank you to the Department of Economics and Business, Gadjah Mada University and my research assistant Fani Pramuditya as well as Gojek management for supporting the research process. Hopefully, this article can be accepted for publication in the journal.

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